

BOOK REVIEW

KELLY ALLRED. 2008. **Flora Neomexicana, I: the Vascular Plants of New Mexico. An Annotated Checklist to the Names of Vascular Plants, with Synonymy and Bibliography.** (no ISBN, hbk.). Published on demand by author. (**Orders:** www.lulu.com). \$60.00, 617 pp. 6" × 9".

Having been a co-author of a similar, but much abbreviated catalog of the Colorado Flora (Weber & Wittmann 1992), I am impressed by the Roman numeral "I" following the title. This seems to indicate that future volumes plan to provide similar catalogs to the misnamed "lower" plants, including at least lichens and bryophytes. Let us hope that the project prospers. Most popular floristic books create a false assumption that vascular plants are the end and all of botanical biota.

This volume is an important milestone. Much more than the checklist named on the cover, the introduction presents an overview of the extent of the territory, its geological history, soils, ecoregions, vegetation types, and a lexicon of terms applying to these features. Also included is a brief history of the science from the Mexican Boundary Survey and the Pacific Railroad surveys up through 1915 and the lives of the prominent field botanists who scoured the terrain. A special section lists species of special concern, endemics, aliens, statistics on numbers of categories, and noxious weeds, providing answers to queries on these timely topics.

The checklist treats the major groups of plants: Ferns and Fern Allies, Gymnosperms, Dicots, and Monocots, each with their families in alphabetical order. There is a page-index to the families and genera. The catalog, while necessarily headlining the scientific name that the author prefers, does not decree its proper usage, for the synonyms are drawn from the previous reports for New Mexico, citing the references in which they have been used. Thus one is free to select the name suiting the user's taxonomic philosophy. For example, in the Asteraceae, under the family there are references to the most recent literature. Under each genus, one or more citations lead one to pertinent papers. References (conveniently abbreviated) justify inclusion of the species in the list.

Unfortunately, in these times, such a catalog becomes obsolete as soon as it is published. The *Flora of North America*, now in publication midstream, will make it necessary for future botanists—amateur and professional—to decide which names to use in instances where the new and immature disciplines of cladistics and molecular biology boldly decree the validity of emerging information dealing with phylogeny. I hold that floras try to deal as best they can with traditional morphological features implying relationships. The language and mechanics of the new disciplines is not familiar enough to the majority of practical botanists. We find it interesting to learn what the new school is saying about evolutionary descent, but it is hard for practitioners to test their findings in terms of the scientific method.

In practice, I feel that with botanical nomenclature in such a state of flux, I can honestly urge the workers in the field to select those names that they are familiar with and that are justified by their experience. After all, scientific names are the shortest expression of a point of view. They are not etched in stone. And the *Catalog of the New Mexico Flora* is precisely what the practitioner needs to do satisfactory work.

This volume, while its readership may be small, is an extremely important one. How many thousands of hours did it take to make this compilation? Such a treatment is a strong endorsement of the value of herbaria and hard-copy literature. All of the names listed here are backed up with vouchers in some herbarium.

My criticisms are minor; they simply speak to things that I wish were included or omitted. Most of them would have doubled the size of the book. I miss not seeing running heads. I deplore the new-age habit of creating a "common name" for all species. Who will ever use them? Lloyd Shinnars would turn over in his grave. Instead of all the spurious "common" names, I would have been more interested in seeing the Spanish names for common species, be their uses medicinal or gastronomic. I am sorry to see that the phylogenetic taxonomies created by cladistics and molecular biology have been uniformly accepted as if they were the last word in nomenclature. I miss literature citations of the families, genera, and species. I miss specimen citations for species known from only one or a few collections, and the herbaria housing the vouchers.

The interior western states are still remnants of a botanical frontier. We lack the great herbaria, libraries, comrades-in-arms, amateurs, university curricula, financial support, and public understanding that botanists have come to expect and enjoy on the earlier-settled east and west coasts. The area is immense, the zones of activity small, and the flora still yielding new species and genera. Here many of us have worked alone for our entire careers, without opportunity for first-hand intellectual exchange. It is gratifying to see that New Mexico is alive and kicking, and its botanists should be congratulated on the resurgence of solid research on the ground.—William A. Weber, Prof. Emeritus, Curator, University of Colorado Herbarium, Boulder, Colorado 80309, U.S.A., bill.weber@colorado.edu.